

## Causes



Underlying chronic kidney problems (obstruction, infection or use of drugs that can potentially do harm to the kidneys)



High blood pressure



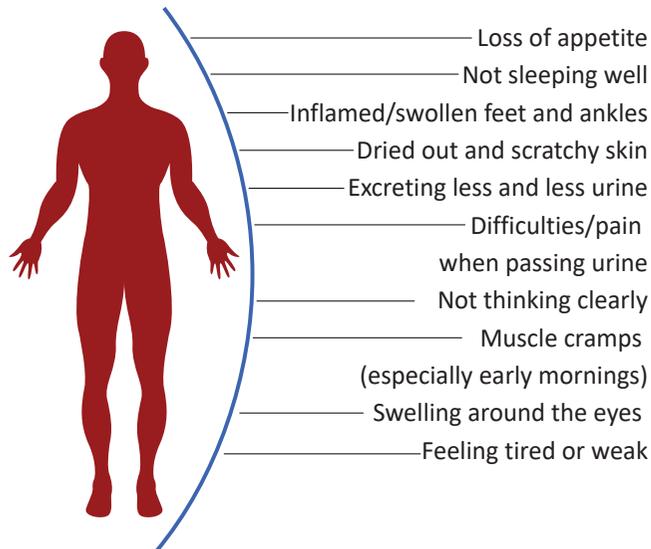
Diabetes



Heart disease

## Signs and symptoms

(After 60% - 70% of kidney function already lost)



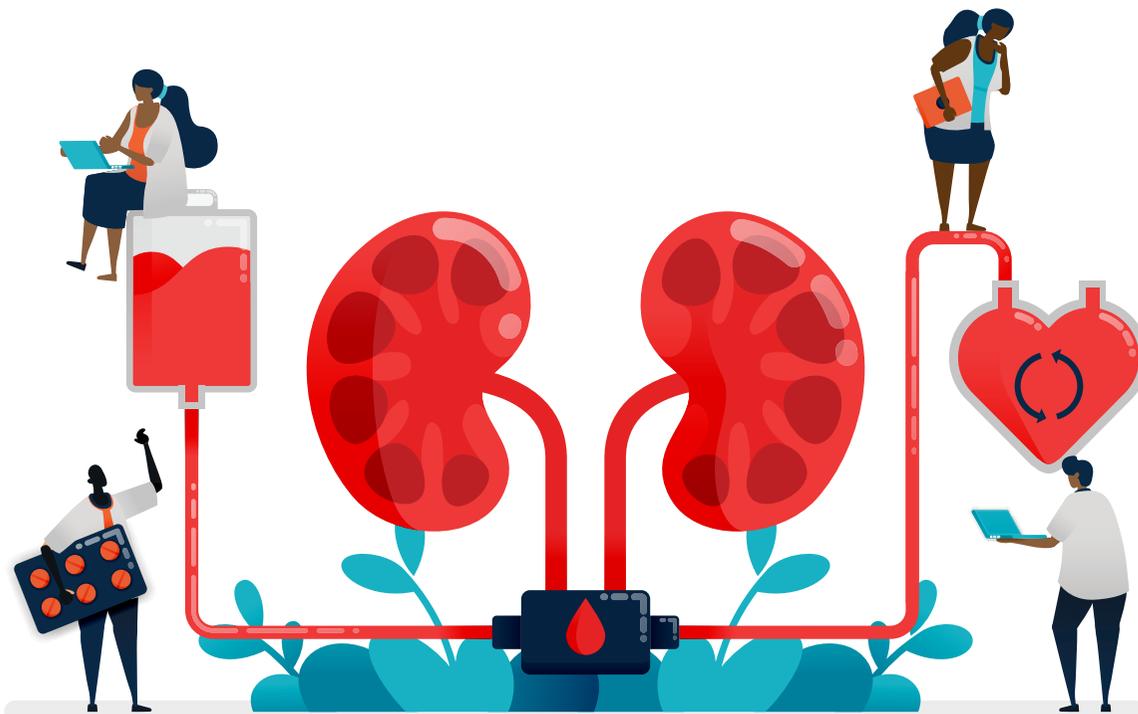
## Risks

 High blood pressure	 Surplus consumption of proteins	 Smoking
 Diabetes	 Family history of Chronic Renal Failure	 Obesity
 Drugs and toxins (Several other medications, toxins pesticides, street drugs)	 65 or older	 High cholesterol
 Dehydration	 Heart disease	<b>UTI</b> Neglected and untreated urinary tract infections

# Management

- To identify the underlying cause and determine if it can be treated.
- If you have diabetes, strive to keep your blood sugar controlled.
- If you have high blood pressure, strive to keep it controlled optimally.
- The aim of treatment is to preserve as much kidney function as possible to delay progression of the disease.
- The disease cannot be cured by medication.
- Medication is used to treat the underlying symptoms.

- Adopt a positive attitude from the outset, and make the necessary plans around your dialysis schedule to rest and maintain a balanced lifestyle.
- Ask for the support of family and friends to ease your emotional burden.
- Listen to your doctor's orders and treatment to maintain an optimal life.
- See your Dietician regularly and follow your customized eating plan. (The intake of proteins, salts, potassium and fluid must be controlled to prevent build-ups in the blood stream).
- Learn all you can about your disease, understand the underlying cause of the condition, the relationship between food and your kidneys, treatment options and how to gain the best possible quality of life.



## Dialysis

The functions of the kidneys can be replaced by means of dialysis, which is a lifesaving option, but not a cure. These 2 options are:

1. **Haemodialysis** is done by means of a machine which filters and cleans the blood. It is usually done 3 times a week at a renal facility.
2. **Peritoneal Dialysis** is done through an implant in the inner lining of the abdomen to filter blood and can be done at home.

# Stages

<b>STAGE 1</b>	Normal or High GFR (GFR > 90ml/min)	Somewhat reduced functionality. No signs or symptoms yet. Diagnosis unlikely.
<b>STAGE 2</b>	Mild (GFR = 60-89ml/min)	The same as stage one but with more reduced functionality. Because of no signs and symptoms, patients do not know they have 2nd stage of the disease.
<b>STAGE 3</b>	Moderate (GFR = 30-59ml/min)	Signs and symptoms start to show. Kidney performance diminishes, waste material builds up in blood stream. Complications like high blood pressure, anaemia and/or early bone disease start.
<b>STAGE 4</b>	Severe (GFR = 15-29ml/min)	Complications like high blood pressure, anaemia, bone disease, coronary disease and other cardiovascular ailments develop. In this stage patients will need dialysis or eventually a kidney transplant.
<b>STAGE 5</b>	End stage (GFR < 15ml/min)	In this stage the kidneys are no longer able to function with everyday living requirements. Permanent dialysis and later kidney transplant will be needed.

